Install the Switch

To install your switch on a flat suface, you do not need any special tools. Be sure the switch is positioned with at least 2 inches of space on all sides for ventilation.

To install the switch in a rack, first attach the mounting brackets to the side of the switch. Insert the screws provided in the rack mount kit through each bracket mounting hole in the switch. Tighten the screws with a #1 Phillips screwdriver to secure each bracket. Align the mounting holes in the brackets with the holes in the rack and insert two pan-head screws with nylon washers through each bracket and into the rack. Tighten the screw with a #2 Phillips screwdriver to secure the switch in the rack.

Connect the Devices

To connect devices to the switch:

- 1. Connect the devices to the 10/100/1000 Mbps ports on the switch, using Category 5 UTP cable and an RJ-45 Plug.
- Note: Ethernet specifications limit the cable length between your PC or server and the switch to 328 feet (100 meters) in length.
- 2. Connect one end of the DC power adapter cable to the power outlet on the rear panel of the swith and other end of the power adapter cable to wall outlet.

NETGEAR®-

NETGEAR, Inc. 4500 Great America Parkway Santa Clara, CA 95054 http://www.NETGEAR.com

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Trademarks

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Statement of Condition

In the interest of improving internal design, operational function, and/or reliability,

NETGEAR reserves the right to make changes to the products to the products described in this document without notice.

NETGEAR does not assume any liability that may occur due to the use or application of the profuct(s) or circuit layout(s) described herein.

Certificate of the Manufacturer/Importer

By certified that the NETGEAR Prosafe JGS524F Fast Ethernet Switch has been

suppressed in accordance with the confitions set out in the BMPT-AmtsblVfg 243/1991 and Vfg 46/1992. The operation of some equipment (for example, test transmitters) in accordace with the regulations may, however, be subject to certain restrictions. Please refer to the notes in the operating instructions. Federal Office for Telecommunications Approvals has been notified of the placing of this equipment on the market and has been granted the right to test the series fot compliance with the regulations.

Voluntary Control Council for Interference (VCCI) Statement

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

EN 55 022 Declaration of Conformance

This is to certify that the NETGEAR Prosafe JGS524F Fast Ethernet Switch is shielded against the generation of radio interference in accordance with the application of Council Directive 89/336/EEC, Article 4a. Conformity is declared by the application of EN35 022 Class A (CISPR 22).

Federal Communications Commission (FCC) Compliance Notice: Radio Frequency Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interfernece.
- This device must accept any interfernce received, including intrfernce that may cause undesired operation. Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interferences in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interferences to radio communications. However, there is no guarantee that interference will not occur in a particular installation if this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.
- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

Canadian Department of Communications Radio Inerference Regulations

This digital apparatus (NETGEAR Prosafe JGS524F Fast Ethernet Switch) does not exceed the Class A limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Céflement sur le brouillage radioélectrique du mimistére des Communications

Cet appareil numérique (NETGEAR Prosafe 'IGS524F Fast Ethernet Switch) respecte les limites de bruits radioélectriques visant les appareils numériques de class A rpescrites dans le Reglement sur le brouillage radioélectrique du mimisére des Communications du Canada.

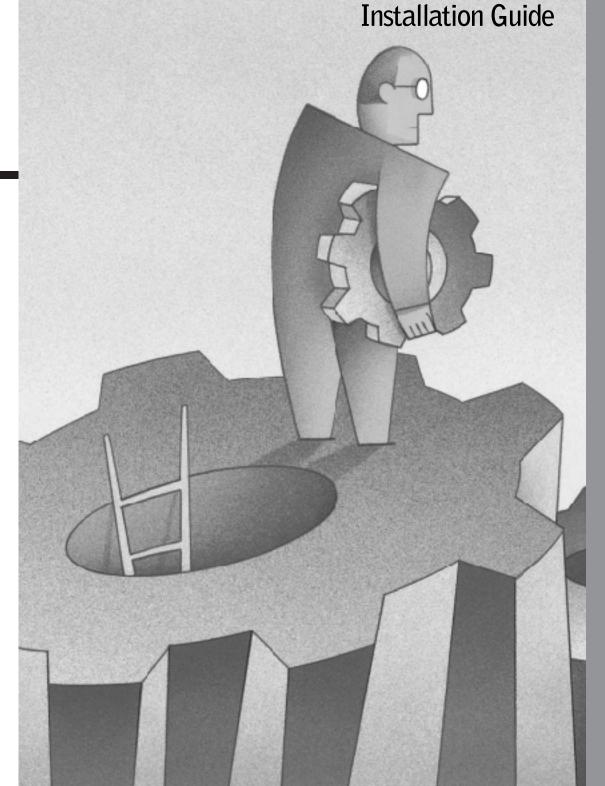
この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A



NETGEAR®

JGS 524F

ProSafe 10/100/1000 Switch W/SFP slots



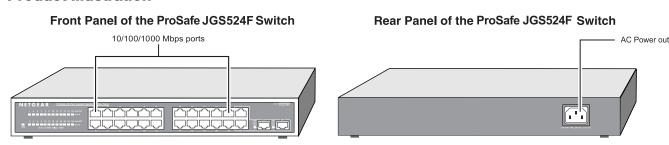
Start Here

The NETGEAR® ProSafe JGS524F 24 Port 10/100/1000 Mbps Switch with 2 SFP slots provides you with a low-cost, high-performance network solution and are designed to support power workgroups operating at either 10 megabits per second (Mbps) or

With the ProSafe JGS524F 10/100/1000 Mbps Switch with optional SFP GBIC modules (AGM731F, AGM732F, AGM733), improvement is accomplished very easily, with no change to the desktop (the network interface cards or software and the network wiring).

As a result, the performance upgrade and the applications it enables are obtained very quickly and at a low cost.

Product Illustration



LEDs

The table below describes the activity of the LEDs.

Label	Color	Activity	Description
PWR (Power)	Green	On Off	Power is supplied to the Switch. Power is disconnected.
Link / Activity (Port Number)	Green	Solid Blinking	Valid Link on the port. Packet transmission or receiving on the port.
10/100/1000M	Orange Green	On Off	The port is operating in 1000 Mbps. The port is operating in 10 Mbps mode, if corresponding L/A LED is Solid or Blinking
SFP	Green	On Blinking	Valid Link on the port Packet transmission or receiving on the port

SFP GBIC Module

The module bays accommodates standard SFP GBIC modules, such as the AGM731F or AGM732F from NETGEAR, allowing you to have fiber connections on your network. The module bays are combo ports, sharing a connection with an RJ-45 port. Being a combo port, only one type of connection can be active at any given time. For example, both copper and fiber port cannot be used at the same time. If both connectors are plugged in at the same time, the fiber port will be active.

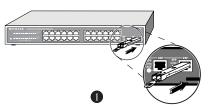
The SFP GBIC bay accommodates a standard SFP GBIC module.

Installing an SFP GBIC Module

The following procedure describes how to install an SFP Gigabit Ethernet module in the switch's Gigabit module bay. Standard SFP GBIC modules are sold separately from the JGS524F. If you do not want to install an SFP GBIC module at this time, skip this procedure. To install an SFP GBIC module:

o Insert the SFP module into the SFP module bay. Press firmly to ensure the module seats into the connector.

Note: SFP transceivers are hot-swappable. The switch does not need to be powered off before installing or removig a transceiver. However, always first disconnect the network cable before removing a transceiver.



Network Port

All ports on the switch are 10/100/1000 Mbps capable ports that auto negotiate for speed, and duplex. Additionally, all ports have Auto UplinkTM to make the right connection.

Auto Uplink[™]

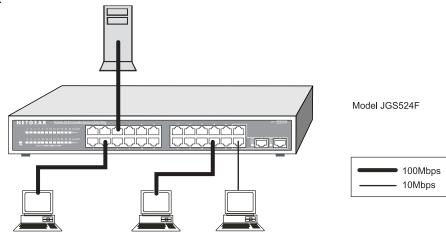
The Auto Uplink technology that NETGEAR has included in this product will automatically sense whether the straight-through cable plugged into any port should have a 'normal' connection, e.g. connecting to a PC; or an 'uplink' connection, e.g. connecting to a router, switch, or hub. That port will then configure itself to the correct configuration. This feature also eliminates the need to worry about crossover cables, as Auto Uplink will accommodate either type of cable to make the right connection.

Note: Auto Uplink will compensate for setting uplink connections, and crossover or straight-through cables. Using Auto Uplink to create multiple paths between any two network devices will disable your network.

Applications

Desktop Switching

ProSafe JGS524F switch is used as a desktop switch to build a small network that enables users to have 1000 Mbps access to a file server. If a full-duplex adapter card is installed in the server or PC, a 2000Mbps connection is possible on the port where the server or PC is completed.



Standards Compatibility	IEEE 802.3i 10BASE-T Ethernet, IEEE 802.3 100BASE-FX Fast Ethernet, IEEE 802.3x Flow Control,		
Ctarragrae Companism;	IEEE 802.3ab 1000BASE-TGigabit Ethernet, IEEE 802.3z 1000BASE-X		
	Compatible with major network software, including Windows, NetWare, and Linux		
Date Rate	1000 Mbps with 4B/5B encoding and MLT-3 physical interface for 100BASE-TX		
	10,100 or 1000 Mbps half-duplex/ 20 200 or 2000 Mbps full-duplex		
Network Interface	RJ-45 Maximum connector for 10BASE-T, 100BASE-TX or 1000BASE-T Ethernet interface		
Power	28.5W		
	100-240VAC/50-60 Hz universal input		
Dimensions	328x43.2x169mm		
Weight	1.7kg/3.7 lbs		
Environmental Specifications			
Operating temperature:	0 to 40° C (32 to 104° F)		
Operating humidity:	90% maximum relative humidity, noncondensing		
Electromagnetic Compliance	VCCI Class A/ FCC Class A/ CE/ C-tick		
Safety Agency Approvals	UL/CUL		
Performance Specifications	Frame filter rate:1,480,000 for 1000Mbps		
	:148,000 for 100 Mbps		
	:14,800 for 10 Mbps		
	Frame forward rate:1,480,000 for 1000Mbps		
	:148,000 for 100 Mbps		
	:14,800 for 10 Mbps		
	Network latency		
	(using 64-byte packets):100 Mbps to 100 Mbps: 10 µs max		
	Address database size: 8000 MAC addresses		
Queue buffer	256KB		
MTBF	262491.8 hrs (29.9 yrs)		